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ABSTRACT

This paper focuses on how educational decision-makers can make use of futures research through a better understanding of forecasters' perspectives. Eight problems in communicating that are significant in contributing to poor usage of forecasts by educational decision-makers are: (1) overuse of jargon, (2) preoccupation with technological solutions, (3) ethnocentric perspectives, (4) use of narrow databases, (5) ignoring normative issues, (6) overemphasizing prediction, (7) preoccupation with internal trends, and (8) tempocentrism. The types of miscommunication prevalent in recent United States education-related forecasting are discussed; four specific publications are cited. Preoccupation with internal trends is the most prevalent type of miscommunication found in these publications, and next is the ignoring of normative issues. Other significant problems include an overemphasis on prediction, tempocentrism, and factors internal to education while ignoring significant external issues. Strategies offered for decision-makers and forecasters to follow in improving forecasting techniques in education include: use of plain language, envisioning of social inventions, generalizing forecast interpretations, widening databases, minimizing temporal restrictions, avoiding ethnocentrism and tempocentrism, and building networks. (MD)

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PUTTING EDUCATIONAL FORECASTS INTO PERSPECTIVE:

A GUIDE FOR DECISIONMAKERS

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Introduction

The issue of maximizing communication between forecaster and user has long been of concern in futures research. In 1977, Dr. Wayne Boucher of the Center for Futures Research at the University of Southern California edited a volume entitled The Study of the Future: An Agenda for Research. This report summarized the results of a grant from the National Science Foundation to identify the most pressing conceptual issues in futures research-areas in which new paradigms were needed to foster development of this field.

The second on the list of "most urgent research projects" (immediately behind "evaluate the adequacy of current theories of social change") was this item:

> Devise new or better methods for communicating forecasts to the policymaker so that he understands the values implications of different possible events (i.e. how can background differences between the forecaster and user be minimized?)

Clearly, the professional forecasters participating in this study had found (probably from their own experiences) that producing a high quality product is not the final step in conducting futures research. One must also ensure that the decisionmaker involved comprehends the forecast and its implications for his present policy choices.

At the world Future Society General Assembly in 1982, Boucher presented a retrospective analysis of progress made since his research agenda was published five years before. He concluded that no singificant gains had taken place in the ability of forecasters to communicate effectively with clients (or vice versa). Certainly, this is discouraging given

both the importance attached to this research priority and the growing use of forecasts by decisionmakers.

The authors presented a paper on "Strategies for Overcoming Misutilization of Educational Forecasts" at the Third International Symposium on Forecasting in Philadelphia. That study focused on what steps forecasters could take to tailor their research to the needs of educational leaders. (Educators were selected as a useful subpopulation of futures research clientele to study, but the results are generalizable to many other types of policysetters.) This paper presents a different, but related focus: how educational decisionmakers can optimize the usefulness of futures research through understanding the perspective of forecasters.

PROBLEMS IN COMMUNICATION

In order to reduce communications barriers between forecaster and client, the different types of obstacles to mutural comprehension must be systematically removed. At times, a forecaster has made no effort to direct his work toward the interests of educational leaders, but the futures research product is potentially of great value in decisionmaking. Then, the user must find ways to understand the perspective of the forecaster so that the implications of this research for education become clear.

Major types of barriers which impede the comprehension of education-related forecasts include:

a). Overuse of Jargon

This can be a problem for the forecaster or the client (or both!). Too often the methodological terms in which futures research is described are needlessly abstruse, or the scenarios use multiple, polysyliabic words as a spurious means of suggesting validity or profundity. In turn, educators frequently refuse to translate general concepts into their own particular jargon or ignore an otherwise applicable forecast because it was prepared for a broader audience.

b). Preoccupation with Technological Solutions

Many educators and forecasters are reluctant to believe that existing social, institutional, familial, or political structures can be deliberately redesigned by human actions. The only "legitimate" change agent is seen as techology. Some people then interpret technological developments as generally negative, others as generally positive, but new educational technologies are seen by both

of these schools of thought as the only alternative to a "surprise free" extrapolation of present social/political conditions. Such ideological assumptions place too strong a role on technology (pro or con) and preclude the consideration of other probable alternative futures for education.

c). Ethnocentric Perspectives

Different countries and cultures have widely varying approaches to education. Some decisionmakers and forecasters are accustomed to educational policy being set at the national level; others come from regions with strong local control of instructional content and practice. In some nations, education is an explicit ideological tool of the state; in others, the socialization and propaganda function of schooling is more implicit and indirect. When the forecaster and the educational policysetter are of different cultural or national backgrounds, then the perspectives each has about the nature of education can block communication.

d). Use of Narrow Databases

Those forecasters writing for an international audience must ensure that their work contains alternative descriptive statements about the current status of education. Some countries have shrinking traditional age student populations; others have rapidly growing educational clienteles. One situation may evolve into the other, or both types of educational systems may have common problems of resource allocation. However, unless the forecaster presents a broad range of alternative evolutionary pathways for education (or the user is capable of making this conceptual leap from a

a narrow persentation), then the generalizability of the forecast is minimal.

e). Ignoring Normative Issues

Education instrinsically involves value judgements, prioritizing among competing issues, and evaluating the normative consequences of choices. Too often, forecasters and educational decisonmakers pretend that this aspect of instruction does not exist or can be ignored in planning. As a result, overly quantitative and extrapolative research models are used, which are of little help in addressing the major longterm issues vital to the educational process. Alternatively, at times such an ideologically one-sided perspective is presented that alternative normative stances and values choices are again bypassed, this time through being implicitly labeled as unacceptable.

f). Overemphasizing Prediction

Forecasters are often under pressure from educational leaders to indicate "what's really going to happen" rather than presenting an array of alternative scenarios. Frequently, researchers narrow to only one probable future for education (because of limitations of funding or time or client wishes) only to find several years later that some alternative possibility is instead occuring. Even though the use of prediction may facilitate planning, such prophecies have a disconcerting habit of turning out wrong longterm. Forecasters and decisionmakers both need to focus on contingencies, alternative scenarios, and "wild cards," as the present disastrous lack of anticipation in education is partly caused by a myopic vision of "one future."

g). Preoccupation with Internal Trends

Educational decisionmakers are naturally interested in forecasts of factors with which they are familiar (rates of innovation in schools, trends in educational legislation). However, the dominant forces affecting educational evolution over the past generation have been external to the profession and its preoccupations. For example, U.S. schools have been more shaped by the Civil Rights movement, Sputnik, and recent global economic problems than any classroom innovations. In any country, forecasts will be most useful if centered on largescale external trends; of course, the implications of these developments for schools must then be assessed and discussed.

h). Tempocentrism

Dr. Robert Textor at Standford University has coined the term "tempocentrism," which is analogous to ethnocentrism. People who are rigidly dependent on their culture's assumptions about reality are ethnocentric; they cannot cope with being in a different culture because this contradicts their beliefs about "the way things must be." Similarly, one type of tempocentrism person becomes fascinated with some time period during his life. Institutional and societal patterns from this period become the right way to be," and any later changes are seen as a regression from this ideal rather than as an evolution into a new period in history. Another type of tempocentric person becomes focused on the present and recent past as the major indicator of what the future must be: if times have been good, this person is optimistic; if bad, pessimistic. Forecasters and educational decisionmakers are both

sometimes tempocentric; as a result, alternative educational visions and scenarios are repressed.

All of these types of barriers to communication are significant in contributing to poor usage of forecasts by educational decisionmakers. Futures researchers can attempt to avoid the problems described above but, if they do not, then aiding decisionmakers to understand and compensate for the perspective of the forecaster becomes vital.

EXAMPLES OF COMMUNICATIONS PROBLEMS

Unfortunately, illustrations of poor utilization of educational forecasts are all too common. Both forecaster and user bear responsibility for these problems, as each side has tended to fall into the traps discussed above. Analysing past errors can aid in determining which of these traps are most troublesome and what patterns of misue tend to occur most frequently.

In the United States, a number of major education-related forecasts have been produced over the past decade. Using funding from the National Institute of Education, the Hudson Institute compiled a volume on Future Trends in Education Policy (1979), edited by Jane Newitt. The Committee on Education and Labor, U.S. Congress published a report in 1980 on Needs of Elementary and Secondary Education in the 1980s. The National Commission on Excellence in Education released in 1983 a longterm plan to redress emerging problems in the schools.

In addition, some major futures works not specifically directed to educational decisionmakers have nonetheless implied significant consequences for the process of schooling. Alvin Toffler's book The Third Wave contains sections discussing the impact of a new economic order on education. John Naisbitt's Megatrends considers the likely

implications for schools of emerging developments. Both of these bestsellers have been influential in determining American educational policy.

Category by category, what patterns of miscommunication have resulted from the use by educational decisionmakers of these works? To what extent has this been caused by the forecaster's perspective, to what extent by a lack of proper interpretation by the user? Do the forecasts directed specifically to educators exhibit a different set of problems than the more general forecasts.

In order of significance, the types of miscommunication most prevalent are as follows First, preoccupation with internal trends mars the effectiveness of the forecasts directed specifically toward educational leaders. Major external trends are omitted or dismissed in all the studies discussed above, especially in the economic and political sectors. While this fascination with minor types of change within schools is less a problem in Toffler's and Naisbitt's more general forecasts of society, educational decisionmakers have tended in their useage of these works to focus only on narrow issues, thus obviating the value of the broader perspective.

Second, ignoring normative issues is a clear problem in all these forecasts. The role of education in socializing and culture-shaping is minimized both my futures researchers and users, for education-specific and more general forecasts alike. Equal access to education is the one exception to this generalization; this is a strong theme of historic concern in the U.S. and is addressed by all the futures researchers. Beyond equity, however, values judgements, prioritizing among competing concerns, and normative consequences of choices are largely disregarded in the forecasts and in their utilization.

An overemphasis on prediction, coupled with tempocentrism, also limits the usefulness of all these futures perspectives. In each education-specific forecasts, one diminant context within which education will evole is portrayed, and subsequent discussion focuses on how the traditional model of teaching/learning will adapt to this situation. No serious concern is given to alternative societal scenarios or educational models. Similarly, the general futures works are strongly ideologically biased toward a positive extrapolist perspective, with contervailing views of the future minimized. Unfortunately, users of these forecasts have not identified these problems of prediction and tempocentrism as important defects; instead, these weaknesses have been incorporated by educational decisionmakers into their planning and policysetting.

Preoccupation with technological solutions is a concern in several of the forecasts. Toffler, the Hudson Institute group, and Naisbitt all focus on technical innovations as the key driver of change in society (and education). This overemphasis on technology is coupled with an unnecessary use of jargon, especially with regard to methodology. Educational decisionmakers, however, are skeptical about both the efficacy of technology and the infallibility of futures research. As a result, these weaknesses in the forecasts have been noted on taken into account by most users.

The works discussed were produced largly for an audience of U.S. readers (although the more general futures forecasts also claim applicability to all the developed countries). Thus, an ethnocentric perspective and the use of limited databases are not surprising in these predictions. Nonetheless, little attention is paid to experiences of other countries

which might provide valuable information for American educators, so the tone of the forecasts is unnecessarily provincial. An instructional system is strongly influenced by the assumptions of its culture, so generalization from one nation to another is tricky, but more overlap exits among educational problems worldwide than these forecasts would indicate.

All the types of miscommunication delineated earlier are thus present to some extent in this sample of influential forecasts for U.S. education. Most significant are problems of an overemphasis on prediction, tempocentrism, and factors internal to education while ignoring significant external and normative issues. Both education-specific and more general predictions exhibited a roughly similar pattern of miscommunication; broader forecasts were somewhat more cognizent of important factors outside of education, but were skewed more toward a preoccupation with with technology. Futures researchers involved were not particularly adept at minimizing these different types of bias in their work, nor have educational decisionmakers transcended these weaknesses in their usage of these forecasts.

STRATEGIES FOR DECISIONMAKERS AND FORECASTERS IN EDUCATION

Historically, most of the forecasting used in schools or educational institutions throughout the world still focuses primarily on econometric or demographic projection. How much funding and number of students will remain an important consideration. The most important concern of decisionmakers is still the budget and how to divide it.

Recently, however, more attention is being paid to other kinds of forecasts, such as the expected rise in standard exam scores because

of curricular changes, whether or not teachers should be paid more and held more accountable, the projected adventages of computer use in classrooms, and the desirability of "ethical studies" in all baccalaureate programs. Pure trend extrapolation of educational needs have become less realistic in the assessment of educational goals. Justifications beyond "bigger is better" and "more of the same" are being demanded. Educational futurists have contributed greatly to alternative futures, and advocate stronger ties between decision-makers and forecasters. Very little practical knowledge of the problems facing each group has been forthcoming.

The following strategies will hopefully help decisionmakers and forecasters in the improvement of forecasting techniques in education. They are not intended to be all-encompassing, nor are they an easy fix to the growing complexities facing educators today. They will, however, improve the communication between forecasters and educators -- a necessary step in highly coordinated and sophisticated planning.

I. Forecaster Strategies

a. Present Findings in Common Language

Although it may be more difficult to do, a forecaster's findings must be stated in a clear and concise manner. Clients of these forecasts are often not experts in the jargon or the methodologies used. Educators have different conceptualizations of verbage and significance of results. Murphy's Law must be used here as a rule of thumb. ("O'Toole's Law" states that Murphy was an optimist, and forecasters might be even more prudent to use O'Toole's Law than Murphy's).

b. Consider Social Inventions as Well as Technological Inventions in Forecasts.

Education itself is a social invention, and forecasters need to consider the strong possibility that change will come not from just technology, but from the social institutions themselves. In The Far Side of the Future, the authors suggest that the only social institution that may make a difference in social change is education. Forecasters need to consider that sapiential authority and synergetic social structures could drastically alter forecasts.

c. Widen Databases Used.

Very often the data used in forecasts are purposely limited to make findings more realiable and valid. Forecasters must often provide alternative pathways so educators can draw generalizations from their forecasts. Specific applications could be used for a wider audience if the forecaster knows how educators can use the same kinds of data. Repetition and costly outlays of resources could be minimized if forecasters would widen the databases and draw more general conclusions.

d. Develop More Normative Forecasts.

Although there will be a continued need for quantitative analysis and trend extrapolation, educators will also be forced to prioritize, evaluate and judge what should be in education. Forecasters must develop additional forecasting skills to anticipate and assist educators with these problems.

e. Get in the Habit of Providing More than What's Expected.

Too often forecasters are asked to be "crystal ball gazers"

and provide exact information of what's going to happen. Educating decisionmakers about "wild cards", contingencies and arrays of alternatives rather than telescopic prediction will be of major importance.

f. View Problems with Macrocosmic Elements.

Many changes in education have been influenced by both inside and outside factors. Be prepared to consider outside influences on education as well as any innovation from inside educational institutions.

g. Minimize Temporal Restrictions in Prediction.

Forecasters often restrict their views of data because of time. The immediate past or present are not necessarily the best times to use as a base for forecasting or trend extrapolation. Forecasters should note other periods to ensure tempocentrism is not perpetuated. Forecasters must also ensure they have no preconceived notion of results -- a mistake of the first order in an era of unprecedented change.

II. Decisionmaker Strategies

a. Ask for Specific Objectives in Plain Language.

Just as forecasters are guilty of jargon, so educators couch their requests in a language specific to educational circles. A large obstruction to good communications would be broken if both forecasters and decisionmakers would both use plain language.

b. Envision Social Inventions as Change Agencies.

Because education is itself a social invention, its

imperative that educational decisionmakers use synergetic and sapiential approaches to forecasts and views of alternatives. Technological approaches to problems like learning are not going to be panaceas to the kinds of problems we face in education. There is a need for both social and technological invention in education.

c. Learn to Interpret Forecasts to General Situations.

Sometimes educators need to make conceptual leaps from narrow perspectives utilized by forecasters. Although making general inferences from specific situations has its dangers, it can also be a useful practice.

d. Avoid Ethnocentrism and Tempocentrism

Although educational institutions are notorious for following social demands (rather than exhibiting leadership in change), there is still an expectation that those who make policy decisions in education have some insight into the recognition and resolution of problems. Too often educators feel we must do what has always been done. Recent criticism of education in America has shown that a fixation on "tried-and-true" approaches may be inadequate in the future. Decisionmakers must, therefore, minimize ethnocentric and temporal solutions to educational problems that often have global implications.

e. Ask for More Normative Forecasts.

Decisionmakers in education will be required to make more decisions based on value judgements. As a matter of policy, forecasters should be asked to provide information that will help

make these kinds of choices rather than mere extrapolation of trends.

f. Recognize the Influence of Outside Agencies in Educational Change.

Most of the changes that have occurred in education throughout the world have come from outside agencies. Educators must advise forecasters of this fact, if all alternatives and possibilities will be considered in decisionmaking.

g. Build Networks

Many studies/forecasts in education did not make any impact because they were written with a very small group in mind. Because decisionmakers will be required to make more normative judgements, make generalizations from specific forecasts and use wider databases, there will be a need to share findings and alternatives.

Conclusion

The suggested strategies are in no way an indictment of the educational or forecasting professions. Given the probability of having to do more with less in education, the need for better forecasting and decisionmaking is imperative. The time for reassessment, analysis of old assumptions, and a genuine search for feedback is at hand. One alternative is an educational system that fails to meet expectations, and a society that fails to encourage initiative and enterprise so necessary for successful resolution of future problems.

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